BICYCLE/FRAME INSTRUCTION GUIDE TRANSITION CARBON - ALL MODELS

THIS INSTALLATION GUIDE CONTAINS IMPORTANT INFORMATION. PLEASE READ CAREFULLY AND STORE IN A SAFE PLACE.

Congratulations! The Specialized bicycle you have chosen is among the finest of advanced composite products available in cycling. Carbon fiber is a very special material that requires particular care during assembly, storage and riding. This installation guide contains instructions and warnings, plus torque specifications.

Please read the following instructions. If you have any doubt regarding your mechanical ability and/or installation of this product, visit your local authorized dealer. Specialized recommends that components be installed on the frame using a torque wrench, by a qualified mechanic.

Please read the following Warnings. Because the failure to follow any Warning may result in a catastrophic failure of the frame, resulting in serious personal injury or death, this phrase may not be repeated in connection with each Warning.

To ensure the best assembly possible and to prevent any damage to the components or frame, follow all torque specifications. Please refer to the specific owner's manual for mating component's correct torque specifications. If the mating component's recommended torque exceeds the frame's recommended torque, use the lower torque spec. Due to torque considerations, not all components will be compatible.

> Warning! Failure to follow the torque specifications in this installation guide will void the warranty, but most importantly may result in damage to the frame which may not be visible. If the frame is damaged, this can result in loss of structural integrity, which may result in serious personal injury or death.

Bicycle components such as a handlebar, handlebar stem, seat post, saddle, brakes, all must be compatible with each other, the frame and the intended use. Any doubt regarding compatibility should be discussed with your local authorized Specialized retailer.



Warning! When placing the frame and/or bicycle in a repair stand, clamp the stand using a frame clamp specifically designed for thin-wall carbon tubes, for example the Park Tools 100-X4 Extreme Range Clamp. Clamping the frame with a standard clamp can cause damage to the frame that may or may not be visible.

INSTALLING THE SEAT POST & SADDLE

The Specialized Transition frames require a proprietary seat post, available in 3 different setbacks. The Transition seat post system allows for an extremely wide seat tube angle range which is infinitely variable inside that range, to help the rider achieve the optimal riding position.

To help the Transition frame achieve its aerodynamic benefits, the frame was designed with a very short seat post vertical adjustment range. Proper installation of the Transition Seat Post requires the use of a dedicated Transition Fit Kit tool set.

This setup (fitting and cutting) MUST be performed by an authorized Specialized dealer to ensure that the seat post is cut to the optimal length, to maximize the +/- vertical adjustment range.



Warning! Due to the nature of the seatpost having to be cut to a specific length, the seat post is NOT marked with a minimum insertion line. For proper seatpost insertion, ensure that the seat post extends below the minimum insertion hole located at the back of the seat tube area. Extension beyond the minimum insertion hole in the frame can result in failure.



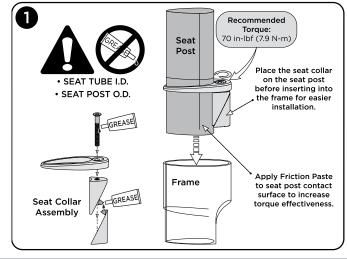
Warning! Do not grease the seat tube surface that contacts the seat post. Grease reduces the friction that is critical to proper seat post grip. Remove any grease from the surfaces of the seat tube and seat post.

TECH TIP: Specialized recommends the application of carbon assembly compound between the seat tube and post to increase friction. Recommended compounds can be found at www.tacx.com. See your authorized Specialized retailer if you have any questions.

Tighten seat collar bolt to recommended torque of 70in-lbf (7.9 N-m). See fig.1 for proper grease and assembly compound application zones.

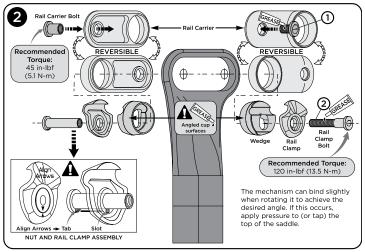


Warning! Exceeding the specified recommended torque limit can result in damage to the seat post and/or frame.



ADJUSTING THE SEAT POST

- Install the seat post into the seat tube (fig.1).
 Install the rail clamp carrier in the chosen direction (reversible) and tighten the alloy rail carrier bolt (bolt #1, fig.2).
- Grease the contact surfaces and bolt threads of the rail clamp Mechanism, then install it in the rail clamp carrier.
- Install the saddle in the rail clamp mechanism.
- Adjust the saddle to the desired height, angle and fore-aft position.
- Torque the rail clamp bolt to the recommended setting. To avoid damage, the nut tab must be properly lined up with the rail clamp slot (bolt #2, fig.2).
- Torque the seat collar bolt to the recommended setting (fig.1).



GENERAL WARNINGS

FORK: Do not remove the small bumpers on the side/back of the fork legs. These are to protect the frame from fork contact.

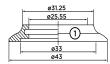
REAR WHEEL: Due to variables in tire manufacture, heat expansion, foreign debris, etc. Specialized recommends a minimum rear wheel-to-frame clearance of 2mm. The UCI requires sufficient clearance such that a credit card must fit between the rear tire and the back of the seat tube.

Thread the horizontal dropout screws in or out to fine-tune the alignment and fore-aft position of the wheel. To ensure that the rear wheel can't slip forward in the dropouts under torque, make sure that the rear axle butts up against the dropout screws before tightening the Quick-Release.

Contact between the frame and tire can cause wear and damage to the frame, which can result in failure.

TRANSITION CARBON - ALL MODELS

HEADSET



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Your Specialized frame does not require any head tube pre-installation preparation. All surfaces are already prepared from the factory, with the exception of greasing the cups.

Use 36° x 45° x 38mm (1") cartridge bearings.

No tools are required for the installation or removal of the cartridge bearings.

BOTTOM BRACKET

Your Specialized frame does not require any bottom bracket pre-installation preparation. All surfaces are already prepared from the factory, with the exception of greasing the threads. It is acceptable to chase the threads if applicable and necessary. Do not face the bottom bracket shell surfaces.

THREADED: Ensure that the bottom bracket shell threads are clean and greased prior to installation. Recommended torque is 442 in-lbf (50 N-m).

OVERSIZED BB: Please refer to the carbon crank installation guide for assembly instructions and compatible tools.

COMPONENT TORQUE SETTINGS

- Braze-on front derailleur: Recommended torque is 44 in-lbf (5.0 N-m).
- Rear derailleur: Recommended torque is 70 in-lbf (7.9 N-m). Ensure threads are clean prior to installation.
- Seat collar: Recommended torque is 70 in-lbf (7.9 N-m).
- Downtube (@ BB) Brake Cable Stop: Recommended torque is 35 in-lbf (4.0 N-m).
- Water bottle cage: Recommended torque is 35 in-lbf (4.0 N-m).

Warning! Great care should be taken not to damage composite materials, including the frame and any composite components. Any damage may result in a loss of structural integrity, which may result in a catastrophic failure. This damage may not be visible in inspection. Before each ride, and after any crash, carefully inspect the bioycle for and dotte, fraving, gouging



1. Top cap

2. Compression Ring

3. 1" Cartridge Bearing 4. Crown Race

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carefully inspective bicycle for and dents, fraying, gouging, scratches through the paint, chipping, bending or any other signs of damage. Do not ride if the bicycle shows any signs of these signs. After any crash, and before riding any further, take the bicycle to an authorized Specialized retailer for a complete inspection.

The following illustration highlights all the Transition's relevant geometry measurements and angles.

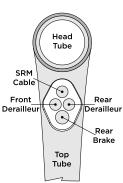
The following charts outline the measurements for each frame size according to the "Reach & Stack" method as well as show the standard method using the effective top tube length and seat tube angle.

The Geometry measurements are separated into three charts, one for each seat post setback (Zero, Standard, Team).

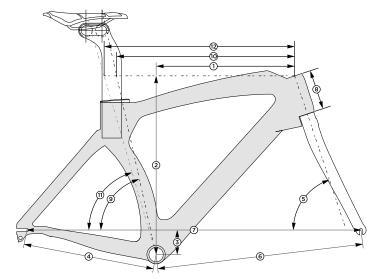
Recommendations about Tri bike fit and how it differs from traditional road bike fit:

- The saddle is typically more forward.
- The saddle position is partly dependant on the amount of handlebar drop and vice versa.
- Position depends on the rider's goals, flexibility, event style and intended riding experience.

To optimize the comfort, performance and control of the Transition bike, see a qualified Tri Bike fitter.



CABLE ROUTING POSITIONS



COMMON GEOMETRY

	SIZE	S (51)	M (54)	L (56)	XL (59)
1	Reach (mm)	380	395	405	425
2	Stack (mm)	505	516	526	527
3	Bottom Bracket Drop (mm)	72	72	72	72
4	Chainstay (mm)	395	395	395	395
5	Head Tube Angle (°)	71.5	72	72	72.5
6	Front-Center (mm)	575	589	602	621
7	Wheelbase (mm)	961	975	988	1007
8	Head Tube Length (mm)	100	110	120	120

ZERO SETBACK POST

	SIZE	S (51)	M (54)	L (56)	XL (59)
9	Eff. Seat Tube Angle (Forward Setting, °)	81.5	82	82.5	83
10	Eff. Top Tube (Forward Setting, mm)	452	463	474	491
11	Eff. Seat Tube Angle (Rearward Setting, °)	77.5	78	78.5	79
12	Eff. Top Tube (Rearward Setting, mm)	488	497	508	524

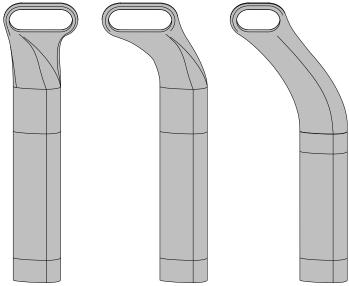
STANDARD SETBACK POST

SIZE	S (51)	M (54)	L (56)	XL (59)
9 Eff. Seat Tube Angle (Forward Setting, °)	77	77.5	78	78.5
10 Eff. Top Tube (Forward Setting, mm)	495	505	515	531
11 Eff. Seat Tube Angle (Rearward Setting, °)	73	73.5	74	74.5
12 Eff. Top Tube (Rearward Setting, mm)	532	541	552	565

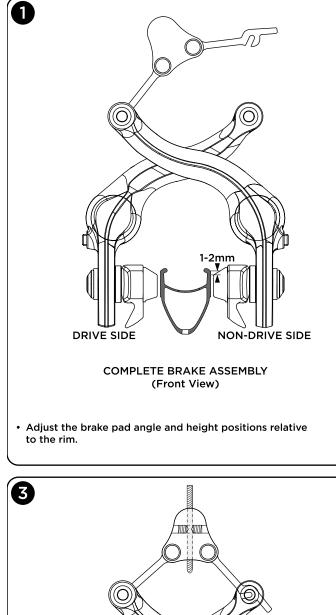
TEAM SETBACK POST \$ (51) M (54) L (56) XL (59)

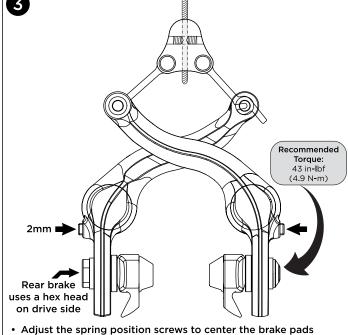
	SIZE	5 (51)	M (54)	L (56)	XL (59)
9	Eff. Seat Tube Angle (Forward Setting, °)	74	74.5	75	75.5
10	Eff. Top Tube (Forward Setting, mm)	525	533	543	558
11	Eff. Seat Tube Angle (Rearward Setting, °)	72	72.5	73	73.5
12	Eff. Top Tube (Rearward Setting, mm)	544	552	562	576

ZERO SETBACK STANDARD SETBACK TEAM SETBACK



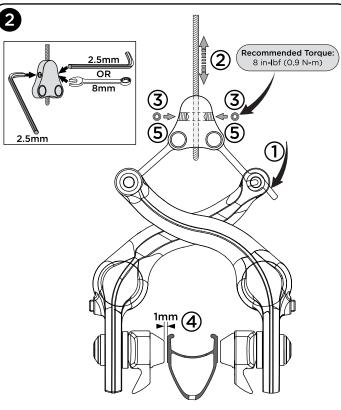
TRANSITION BRAKE ADJUSTMENT





relative to the rim. NOTE: Do not overtighten the position screws, they will cause the spring plates to bind against the position screws.

- REAR BRAKE:
- Make sure the position screws are inset enough so that the drive-side position screw clears the chainring.
- Rear drive side brake pad bolt is hex style for easier access.



- 1. Attach the cable hanger hook on the drive side brake pin.
- 2. Install the brake cable through the cable hanger
- 3. Thread the left and right cable screws inward equally until they barely touch the cable equally.
- 4. Adjust the brake cable height so that the pads are the proper distance from the rim (1mm).
- 5. Tighten the two cable bolts in small equal increments until the recommended torque of 8 in-lbf (0.9 N*m) is reached.
- 6. Sqeeze the brake levers to ensure that the cables are properly seated and that the brakes work properly.

NOTE: To prevent damage to the cable hanger assembly, use one of two options (see illustration above):

- Use a 2.5mm Allen key on both side simultaneously.
- Use a 2.5mm on one side and an 8mm open end wrench on the hanger body.

Using an 8mm wrench with the 2.5mm Allen key, or two Allen keys together will stabilize the hanger and prevent twist damage to the hanger link arms when tightening the Allen bolts.

NOTES:

- Inspect the clearance between the rear brake and the crank to make sure there's no contact when they crank is rotated.
- When the brake rear is disconnected, it will contact the crank. Do not rotate the crank with the brake disconnected.

Downtube @ bottom bracket brake cable stop:

- Tighten bolts to recommended torque of 35 in-lbf (4.0 N*m)
- When packing the frame in a soft travel carry case, remove the brake cable stop to prevent damage to the stop.
- Fine tune the pad width by turning the adjuster barrel.

WARRANTY

For the complete warranty provisions and any additional information, please refer to the Specialized Owner's Manual or www.specialized.com. SPECIALIZED BICYCLE COMPONENTS

15130 Concord Circle, Morgan Hill, CA 95037 (408) 779-6229 Please note all instructions are subject to change for improvement without notice. Rev.1, December 2007